

East Midlands Life & Work Survey 2003 Technical Report

Prepared for the East Midlands Observatory

Market Research UK Limited

December 2003

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**East Midlands
Life & Work Survey 2003**

Technical Report

December 2003

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Conducted between January and May 2003 through a programme of face-to face interviews in the homes of respondents, the **East Midlands Life & Work Survey 2003** obtained responses from a sample of almost 17,000 residents aged between 16 and 74 years throughout the East Midlands region. This technical report provides a full account of the design and conduct of the survey, and of the steps taken to weight and prepare the survey data for analysis.

The report is structured in the following way:

- **Section 2** examines the design of the survey sample, setting out the design objectives and detailing the target distribution of the sample across the geographies making up the East Midlands.
- **Section 3** summarises the procedures that were observed to select the sample of households, and the sample of residents within households, to take part in the survey.
- **Section 4** describes the arrangements that were put in place for the management, conduct and quality control of the survey fieldwork.
- **Section 5** analyses the fieldwork outcomes.
- **Section 6** defines how the achieved sample was weighted in order to correct for any significant under- or over-representations within the sample.
- **Section 7** identifies the derivation of key variables that have been added to the survey dataset as an aid to its analysis.
- **Section 8** concludes the report by highlighting some important limitations on the use of the survey data, with particular reference to the statistical reliability of the results of analysing small sub-samples and to comparisons that may be drawn with the findings of other surveys.

The questionnaire that was used in the survey is reproduced in **Appendix A** to the report. Other survey materials are also reproduced in subsequent appendices.

2. Sample Design

As a starting point, the survey was designed to produce statistically reliable results not only across the East Midlands as a whole, but also for each of the six Counties making up the region and for each of the 40 Local Authority (LA) Districts making up these Counties. To meet these initial design objectives, the survey aimed to complete interviews with a uniform sample of 350 residents in each LA District, producing a total minimum requirement for 14,000 interviews across the 40 Districts. With this size of sample, the range of sampling errors in individual Districts would be limited to $\pm 5.2\%$ at the 95% confidence level.

In Derbyshire, it was agreed that the survey should go beyond the minimum sample requirement by increasing the target number of interviews from 350 to 500 in each of three LA Districts. In Leicestershire, it was also agreed that an extra 180 interviews should be completed in each of 14 specified Electoral Wards located in four LA Districts.

In summary, therefore, there were requirements for interviews to be completed with a total sample of **16,970** residents, comprising a **main** sample of 14,450 residents across the region as a whole and a **boost** sample of 2,520 residents in the selected Leicestershire Wards. Table 1 below gives a breakdown of these requirements by County, while a more detailed breakdown by LA District is provided in **Appendix B**.

Table 1: Target Distribution of Sample by County

County	No of Districts	Main Sample	Boost Sample	Total Sample	Sampling Error
Derbyshire	9	3,600		3,600	$\pm 1.6\%$
Leicestershire	8	2,800	2,520	5,320	$\pm 1.3\%$
Lincolnshire	7	2,450		2,450	$\pm 2.0\%$
Northamptonshire	7	2,450		2,450	$\pm 2.0\%$
Nottinghamshire	8	2,800		2,800	$\pm 1.9\%$
Rutland	1	350		350	$\pm 5.2\%$
East Midlands Totals:	40	14,450	2,520	16,970	$\pm 0.8\%$

At a County level, therefore, the target distribution of the sample would ensure that, with the exception of Rutland, the range of sampling errors would not rise above $\pm 2\%$ in each case. At a regional level, errors would fall below $\pm 1\%$.

In each of the 40 LA Districts making up the region, the survey was required to collect detailed and sensitive information from a highly representative sample of adults aged between 16 and 74 years. Selection of this sample was to be carried out using random probability sampling techniques. In this way, the survey would systematically ensure that every member of the survey population had a known and non-zero chance of inclusion. In this way, too, it would be possible to quote the results of the survey within known confidence levels.

In order to meet these requirements, a three-stage sample selection process was employed. The process entailed:

- random probability sampling of household addresses
- the random selection of a dwelling unit in cases where a single address included more than one unit
- the random selection of an adult to be targeted for interview in cases where a household contained more than one adult.

Each of these stages is described more fully below.

Selection of Household Addresses

For each LA District and for each of the Leicestershire Wards included in the boost sample, a larger initial sample of addresses of households to be targeted for a visit by interviewers was pre-selected on a random, systematic basis from Royal Mail's Postcode Address File (PAF).

In total, the initial sample consisted of **32,580** addresses. The size of this sample was determined using two assumptions:

- It was estimated that the proportion of households with no adults aged 16 – 74 years, and hence the proportion of non-eligible addresses in the initial sample, could be as high as 10% across individual LA Districts and even higher in the boosted Wards.
- It was also estimated that interviews would be completed at about 60% of the remaining eligible addresses.

A full breakdown of the initial sample by LA District is included in **Appendix B**.

Following sample selection, an introductory letter, reproduced at **Appendix C**, was issued to the selected households. As well as explaining the purpose of the survey and emphasising the confidentiality of the exercise, this letter included a *freephone* number to enable households to contact **mruk** direct about the arrangements for the interviewer's visit to their homes.

Selection of Dwelling Units

On their initial visits to the selected household addresses, interviewers were required to establish cases where a single address described more than one dwelling unit. In each such case, they were also required to complete a Kish grid as a means to identify randomly the particular dwelling to be targeted for a visit. The Kish grid completion instructions are reproduced at **Appendix D**.

Selection of Residents

On making contact with an occupant at each of the selected household addresses, interviewers were required in the first instance to establish if the household contained more than one person aged 16 years or over. In each such case, they were also required to select one person to be targeted for an interview. This was achieved by identifying the person whose next birthday was closest to the date of the interviewer's visit.

This approach was favoured over using a Kish grid. While both approaches satisfy equally the requirement for randomness of selection, it was felt that the "*next birthday rule*" would be quicker to operate, less prone to error and easier for respondents to understand.

A significant drawback of both approaches is that differences in household size will result in unequal probabilities of selection of eligible residents, leading in turn to potential bias in the survey data. However, as described in Section 6, specific measures to check for and correct this bias were included in the procedures for weighting the survey data.

4. Fieldwork Administration

As Table 2 demonstrates, the fieldwork for the survey was conducted between 17th January and 26th May 2003 in five broadly concurrent County waves.

Table 2: Fieldwork Schedule

Wave	County	Start Date	Finish Date	Target Interviews
1	Lincolnshire	17 th January	6 th April	2,450
2	Leicestershire & Rutland	17 th January	26 th May	5,670
3	Northamptonshire	17 th January	10 th April	2,450
4	Nottinghamshire	30 th January	9 th May	2,800
5	Derbyshire	30 th January	16 th May	3,600

A team of between 20 and 25 experienced social interviewers was drawn from **mruk**'s fieldforce in the East Midlands to work on each wave. Each team was headed by an Area Manager and was supported by a Deputy Area Manager. In assembling the interviewing teams, special note was taken of the need in some areas to communicate with a high proportion of residents from minority ethnic groups. The teams for those areas thus included both male and female interviewers who were fluent in the main Asian languages.

The fieldwork for each wave was preceded by a comprehensive briefing of the interviewing team to ensure that there was a full understanding of the questionnaire requirements and of the fieldwork procedures to be observed. In the briefings, particular emphasis was also placed on the need to encourage disabled and vulnerable residents to take part in interviews along with their carers, or with relatives or friends.

mruk is an accredited member of the **Interviewer Quality Control Scheme (IQCS)**. IQCS members offer clients the assurance that individuals involved in the supervision and collection of data will be adequately and appropriately trained and supervised, and their work validated in accordance with minimum levels specified by the scheme.

In accordance with IQCS requirements, **mruk** operated a strict quality control regime throughout the fieldwork period. The regime included:

- the accompaniment of each interviewer by a supervisor on at least one occasion
- 100% editing of completed questionnaires
- the validation randomly of at least 10% of each interviewer's quota of completed interviews, consisting of checks on the courteousness of the interviewer; the administration of the questionnaire; the date, time and place of the interview; and the duration of the interview.

5. Fieldwork Response

Table 3 provides an analysis by County of the outcomes of the fieldwork, confirming that the target number of interviews was completed in every case.

Table 2: Analysis of Fieldwork Outcomes by County

County	Total Addresses Issued	Fieldwork Outcomes									
		Dwellings Vacant		No Contact		Ineligible Households		Refusals		Interviews Completed	
		No	%	No	%	No	%	No	%	No	%
Derbyshire	6,690	70	1%	1,972	29%	451	7%	597	9%	3,600	54%
Leicestershire	10,940	108	1%	3,874	35%	731	7%	907	8%	5,320	49%
Lincolnshire	4,550	80	2%	1,324	29%	506	11%	190	4%	2,450	54%
Northamptonshire	4,550	58	1%	1,612	35%	207	5%	223	5%	2,450	54%
Nottinghamshire	5,200	111	2%	1,498	29%	498	10%	293	6%	2,800	54%
Rutland	650	17	3%	165	25%	21	3%	97	15%	350	54%
East Midlands Totals:	32,580	444	1%	10,445	32%	2,414	7%	2,307	7%	16,970	52%

After excluding vacant dwellings and the addresses of ineligible households, the survey achieved an overall response rate of **57%** at the remaining valid addresses.

6. Weighting Procedures

Prior to analysis of the survey data, it was important to compare the characteristics of the achieved sample with the known characteristics of the target survey population, taking steps through weighting to correct any significant under- or over-representations within the sample.

Using data to emerge from the 2001 Census, **mruk** carried out comparisons and subsequent weighting at three levels for every District sample and every boosted Ward sample:

- **Household Size**, correcting for any imbalance between the profiles of household sizes in the achieved sample and the target population.
- **Respondent Characteristics**, ensuring that the socio-economic profile of respondents to the survey was representative of the target population's key demographic and economic characteristics, such as gender, age, working status and ethnicity.
- **Population Proportion**, re-weighting the total achieved sample in each District so that it represented the correct proportion of the target population in East Midlands as a whole.

Set out below is the step-by-step procedure that was followed for establishing and applying weights to each of the samples. The approach is prefaced by a set of key principles that governed its application, and the procedure itself is illustrated using data derived from the achieved sample for Rutland.

Principles of the Approach

Three key principles underpinned the approach to weighting:

- **Significance Test.** Weighting to correct for variations in household size and respondent characteristics was only applied if those variations were significant, i.e. they fell outside the confidence limits calculated for each District or boosted Ward sample.
- **Single Multiplier.** Although an individual data record might be subject to more than one weight because of multiple variations, only one *active* multiplier, or **final weight**, was calculated and used for analysis purposes.
- **Documentation.** A permanent document, detailing the derivation of the final weights, had to accompany the data file.

Details of the Approach

Stage 1 – Household Size Comparison

As a starting point, the profile of household sizes in the achieved sample was compared with the Census 2001 profile. In the Rutland example, no significant variations emerged from this comparison and hence weighting was not required.

Household Size	Sample Size	Sample Proportion	Census Proportion	Variation	Confidence Limit	Weighting Required	sizewt
One adult only	102	29%	29%	0%	±5%	No	1.000
Two or more adults	248	71%	71%	0%	±5%		1.000

Stage 2 – Gender Comparison

The next comparison was between the sample and Census gender profiles. In the case of Rutland, significant variations emerged and the sample was weighted for this characteristic.

Gender	Sample Size	Sample Proportion	Census Proportion	Variation	Confidence Limit	Weighting Required	sexwt
Male	111	32%	52%	-20%	±5%	Yes	1.640
Female	239	68%	48%	+20%	±5%		0.703

Stage 3 – Age Structure Comparison

The next comparison was between the sample and Census age structure profiles. The Rutland comparison revealed significant variations, particularly in the older age groups, and thus the need for further weighting.

Age Structure	Sample Size	Sample Proportion	Census Proportion	Variation	Confidence Limit	Weighting Required	agewt
16 – 19 years	17	5%	9%	-4%	±2%	Yes	1.853
20 – 24 years	30	9%	7%	+2%	±3%		0.817
25 – 29 years	22	6%	7%	-1%	±2%		1.114
30 – 44 years	100	29%	29%	0%	±5%		1.000
45 – 64 years	101	29%	37%	-8%	±5%		1.282
65 – 74 years	80	23%	12%	+11%	±4%		0.525

Stage 4 – Working Status Comparison

The next comparison was between the sample and Census working status profiles. The Rutland comparison revealed significant variations across all of the working status categories and thus the need for further weighting. However, since weighting had already been applied to correct for the over-representation of females in the sample, further weighting to correct for the over-representation of part-time employees (who are predominantly female) would have resulted in over-compensation. In consequence, a single weight was applied across the full-time and part-time employment categories.

Working Status	Sample Size	Sample Proportion	Census Proportion	Variation	Confidence Limit	Weighting Required	workwt
In full-time employment	83	24%	52%	-28%	±4%	Yes	1.558
In part-time employment	63	18%	13%	+5%	±4%		
Unemployed	25	7%	12%	-5%	±3%		1.680
Retired	100	29%	15%	+14%	±5%		0.525
Other inactive	79	23%	8%	+15%	±4%		0.354

Stage 5 – Occupational Structure Comparison

The next comparison was between the sample and Census profiles of the occupational structure of people who are in employment. The Rutland comparison overleaf revealed significant variations, particularly in the Higher Order occupations, and thus the need for further weighting.

SOC Level	Sample Size	Sample Proportion	Census Proportion	Variation	Confidence Limit	Weighting Required	socwt
Higher Order	31	28%	48%	-20%	±8%	Yes	1.719
Intermediate	49	44%	34%	+10%	±9%		0.770
Lower Order	31	28%	19%	+9%	±8%		0.680

Stage 6 – Ethnic Group Comparison

The final comparison was between the sample and Census ethnicity profiles. In the Rutland example, no significant variations emerged from this comparison and hence weighting was not required.

Ethnic Group	Sample Size	Sample Proportion	Census Proportion	Variation	Confidence Limit	Weighting Required	ethnicwt
White	348	99%	98%	+1%	±1%	No	1.000
Mixed	1	<1%	1%	<-1%	±1%		1.000
Asian	1	<1%	<1%	0%	±1%		1.000
Black	0	0%	<1%	<-1%	±1%		1.000
Chinese & Other	0	0%	<1%	<-1%	±1%		1.000

Stage 7 – Population Proportion Correction

The next stage was to calculate the weight needed to ensure that each District or boosted Ward sample represented the correct proportion of the target population in East Midlands as a whole. This weight was applied to all records in the sample. In Rutland, the District sample (350) represented 2.06% of the total achieved sample across the survey (16,970), but the 16 – 74 population in the District (25,277) represented only 0.84% of the overall East Midlands 16 – 74 population (3,020,752).

Sample Size	Total Sample Proportion	Total Census Proportion	popwt
350	2.06%	0.84%	0.408

Stage 8 – Calculation of Final Weight

The last stage was to calculate the final weight – the product of all earlier weights – that should be recorded on the data file and applied to each data record. As the Rutland examples demonstrate, the final weight varies from record to record depending on the characteristics of the respondent and on the outcomes of the comparisons at Stages 1 – 6.

Household Size	Gender	Age	Working Status	Ethnic Group	sizewt	sexwt	agewt	workwt	socwt	ethnicwt	popwt	finalwt
One adult	Male	65 – 74	Retired	White	1.000	1.640	0.525	0.525	1.000	1.000	0.408	0.184
Two+ adults	Female	25 – 29	In part-time work	White	1.000	0.703	1.114	1.558	0.680	1.000	0.408	0.339
One adult	Male	16 – 19	Unemployed	White	1.000	1.640	1.853	1.680	1.000	1.000	0.408	2.083

Outcome of the Approach

The following table profiles the characteristics of the Rutland sample before and after application of the final weights, comparing the weighted sample proportion in each case with the corresponding Census proportion. With the exception of the SOC Level survey proportions, which are based on a very small sub-sample of respondents in employment, none of the variations that remain after weighting rises above $\pm 5\%$. It is clear, therefore, that the overall weighted sample profile is now a considerably closer match to the Census profile.

Household Size	Unweighted Proportion	Weighted Proportion	Census Proportion	Weighted Variation
One adult only	29%	26%	29%	-3%
Two or more adults	71%	74%	71%	+3%
Gender	Unweighted Proportion	Weighted Proportion	Census Proportion	Weighted Variation
Male	32%	54%	52%	+2%
Female	68%	46%	48%	-2%
Age Structure	Unweighted Proportion	Weighted Proportion	Census Proportion	Weighted Variation
16 – 19 years	5%	12%	9%	+3%
20 – 24 years	9%	9%	7%	+2%
25 – 29 years	6%	6%	7%	-1%
30 – 44 years	29%	30%	29%	+1%
45 – 64 years	29%	37%	37%	0%
65 – 74 years	23%	7%	12%	-5%
Working Status	Unweighted Proportion	Weighted Proportion	Census Proportion	Weighted Variation
In full-time employment	24%	44%	52%	+2%
In part-time employment	18%	23%	13%	+3%
Unemployed	7%	15%	12%	+3%
Retired	29%	13%	15%	-2%
Other inactive	23%	5%	8%	-3%
SOC Level	Unweighted Proportion	Weighted Proportion	Census Proportion	Weighted Variation
Higher Order	28%	28%	48%	+20%
Intermediate	44%	40%	34%	-6%
Lower Order	28%	31%	19%	-12%
Ethnic Group	Unweighted Proportion	Weighted Proportion	Census Proportion	Weighted Variation
White	99%	99%	98%	+1%
Mixed	<1%	<1%	1%	<-1%
Asian	<1%	<1%	<1%	0%
Black	0%	0%	<1%	<-1%
Chinese & Other	0%	0%	<1%	<-1%

Rounding Adjustment

The seven weights described above are recorded against each record on the survey data file. To them has been added another weight called **roundwt**. This is a minor adjustment that is applied to every record to counteract the rounding effect of the multi-stage weighting process. It ensures that the total weighted sample and the total unweighted sample come to the same figure, i.e. 16,970.

7. Data Variables

Beyond the primary data obtained from the responses to the survey questionnaire and recorded on the data file, 27 variables were added to the dataset. These are described in Table 3 below.

Except for the first two listed, which draw on data from external sources, the new variables were derived by grouping, banding or computing from the data recorded under existing variables. The latter process was carried out either to rationalise the primary data and hence make it easier to analyse, or to conform to the banding employed in Government-sponsored national surveys.

Table 3: Description of New Variables

Name of Variable	Derivation of Variable
CA Rural Indicator	The Countryside Agency's Ward Level Definition of Rural Areas 2000, in which individual Wards are classified as "rural" or "non-rural"
Sub-Regional Strategic Partnership (SSP)	The East Midlands Development Agency's definition of each of seven SSP's by LA District and Ward
Learning & Skills Council	Grouped from existing County variable
Age Band	Banded from Q1 data
Employment Status	Banded from Q3 data
Student Status	Banded from Q3 data
Economic Activity	Banded from Q3 data
SIC Category	Banded from Q9 data to conform to the broad categories specified by the Standard Industrial Classification (SIC) 1992
SOC Group	Banded from Q11 data to conform to the occupational groups specified by the Standard Occupational Classification (SOC) 2002
SOC Level	Banded from Q11 data to conform to the occupational levels specified by the Standard Occupational Classification (SOC) 2002
Organisation Size	Banded from Q16 data
Investors in People Organisation	Banded from Q35 data
Time Since Last Trained	Banded from Q41 data
Time Spent Training in Last Year	Banded from Q46 data
Highest NVQ Equivalence	Computed from Q55 – Q80 to conform to the Labour Force Survey (LFS) Classification of NVQ Equivalents 1993
Qualified At Least NVQ Level 4	Computed from new Highest NVQ Equivalence variable
Qualified At Least NVQ Level 3	Computed from new Highest NVQ Equivalence variable
Qualified At Least NVQ Level 2	Computed from new Highest NVQ Equivalence variable
English as First Language	Banded from Q82 data
Long-Term Illness or Disability	Banded from Q85 data
Ethnic Group	Banded from Q101 data
Cigarettes Smoked Per Day	Banded from Q89 data
Body Mass Index (BMI)	Computed from Q90 and Q91 data
BMI Band	Banded from new Body Mass Index variable
Travel to Work Time	Banded from Q14 data
Time Unemployed	Banded from Q4 data
State of Health	Banded from Q87 data

The full specification used by **mruk** analysts to create the new variables is reproduced in **Appendix E**.

8. Using the Survey Results

Although the survey was designed to provide a highly robust analysis of the characteristics, experiences and attitudes of the 16 – 74 population throughout the East Midlands, some cautions should be exercised when using the results of any analysis. These concern both the statistical reliability of results based on small sub-samples and the validity of comparing results with the findings of other surveys.

Survey Accuracy

All of the survey percentages obtained from analysis of the survey data will be subject to sampling error. The degree of error in each case will depend on the actual percentage reported and on the size of the unweighted sample (denoted by “*n*”) on which that percentage is based.

For example, a survey finding of 50% across the sample as a whole ($n = 16,970$) will be accurate within $\pm 0.8\%$ (*the sampling error*), with the true percentage, calculated at the 95% confidence level, falling somewhere between 49.2% and 50.8%. The same finding for the Derbyshire sample ($n = 3,600$) will be accurate within $\pm 1.6\%$, but for the Rutland sample ($n = 350$) it will only be accurate within $\pm 5.2\%$. It follows that the range of sampling errors will be higher for findings that are based on even smaller sample sizes.

As an aid to determining the accuracy of particular findings, Table 4 provides further examples of sampling errors on a variety of survey percentages and sample sizes. **Findings based on samples falling below 150 will be highly unreliable and should not be used.**

Table 4: Illustrative Sampling Errors

Sample Size	Survey Percentage								
	10%	20%	30%	40%	50%	60%	70%	80%	90%
1,000	$\pm 1.9\%$	$\pm 2.5\%$	$\pm 2.8\%$	$\pm 3.0\%$	$\pm 3.1\%$	$\pm 3.0\%$	$\pm 2.8\%$	$\pm 2.5\%$	$\pm 1.9\%$
900									
800									
700									
600									
500									
400									
300									
200									
150									

Comparisons with Other Surveys

The East Midlands Life & Work Survey 2003 did not seek to replicate the measurements of employment, training and health indicators that are made by other Government-sponsored surveys, even although the same or similar questions on these indicators were drawn from the latter surveys. All of the other surveys are subject to different survey methods; different respondent selection procedures; different sample sizes; different questionnaire structures; and (often) complex weighting procedures of their own. Consequently, it is not valid to use the results of the Life & Work Survey to obtain up-to-date measurements of the indicators concerned either at region or County levels, and particularly not at an individual LA District level.

For the same reasons, it is not valid to compare the results of the Life & Work Survey with the findings from any previous similar surveys conducted in the East Midlands.

Appendix B: Target Distribution of Sample by LA District

County	LA District	Target Sample	Addresses Issued
Derbyshire	Amber Valley	350	650
	Bolsover	350	650
	Chesterfield	500	930
	Derby	350	650
	Derbyshire Dales	350	650
	Erewash	500	930
	High Peak	350	650
	North East Derbyshire	350	650
	South Derbyshire	500	930
	County Totals:	3,600	6,690
Leicestershire	Blaby	350	650
	Charnwood	1,070	2,290
	Harborough	350	650
	Hinckley and Bosworth	350	650
	Leicester	1,790	3,930
	Melton	350	650
	North West Leicestershire	530	1,060
	Oadby and Wigston	530	1,060
		County Totals:	5,320
Lincolnshire	Boston	350	650
	East Lindsey	350	650
	Lincoln	350	650
	North Kesteven	350	650
	South Holland	350	650
	South Kesteven	350	650
	West Lindsey	350	650
		County Totals:	2,450
Northamptonshire	Corby	350	650
	Daventry	350	650
	East Northamptonshire	350	650
	Kettering	350	650
	Northampton	350	650
	South Northamptonshire	350	650
	Wellingborough	350	650
	County Totals:	2,450	4,550
Nottinghamshire	Ashfield	350	650
	Bassetlaw	350	650
	Broxtowe	350	650
	Gedling	350	650
	Mansfield	350	650
	Newark and Sherwood	350	650
	Nottingham	350	650
	Rushcliffe	350	650
	County Totals:	2,800	5,200
Rutland	Rutland	350	650
		County Totals:	350
East Midlands Totals:		16,970	32,580



Statistics and Research on England's East Midlands

East Midlands Observatory
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Dear Resident,

East Midlands Life and Work Survey

The East Midlands Observatory provides up to date research and statistics on England's East Midlands through its interactive website. It is backed by regional organisations such as the East Midlands Development Agency, the Government Office for the East Midlands, the Regional Assembly, Local Government and Local Learning and Skills Councils. Topics covered include the region's economy, labour market, health, environment and social issues.

The East Midlands Observatory has commissioned an independent research company called Market Research UK Limited to carry out a major sample survey of resident households throughout the East Midlands. The purpose of the survey is to ask selected household members about a range of very important issues including their jobs, skills, education, training, health, lifestyle and the communities in which they live. This information will help key organisations identify the needs of individuals and communities within the region.

I am writing to let you know that you have been selected at random for inclusion in the survey. Over the next few weeks a representative of Market Research UK will call at your home to ask you a series of questions. Your co-operation in taking part will be very much appreciated as the survey is extremely important.

Interviewers who come to your home carry personal identification at all times and this will be shown to you at the start. The interview will be entirely confidential and no-one from the East Midlands Observatory or any other organisation will see your individual answers. At the end of the survey, Market Research UK will provide data and an independent report of the findings to the East Midlands Observatory in a way that will not allow any person or household to be identified.

I would like to thank you in anticipation of your co-operation. In the meantime if you need any further information or have queries about the survey please contact Market Research UK on freephone 0800 161 3157.

Yours sincerely,

A handwritten signature in black ink that reads 'W. Rossiter'.

Will Rossiter
Project Manager

EAST MIDLANDS LIFE & WORK SURVEY 2003

Where There is More Than One Dwelling Unit

1. Begin by establishing how many dwelling units are present at the address. Record this number at A2. In our example, there are 4 units.
2. Now establish the last two digits of the Survey Reference Number for the address. In this example, you would use 6 and 7. Record these digits at A3.

3	4	5	6	7
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3. On the Kish grid, circle the 6 on the **vertical** column on the left where it says **Please Ring**. Then circle the 7 on the **horizontal** row at the top. Where the two numbers intersect on the grid, this is your **start point**. Circle it to remind yourself which one it is.
4. Now remind yourself of how many dwelling units there are at this address. **If there are 9 or less**, choose and circle the next single **possible** number (i.e. one not greater than the number of dwelling units) **on the right** as your selected dwelling unit. In our example, there are 4 units, but your start point is 0. Moving to the right, the next possible number is 4. Record this number at A4, then follow the instructions at A5 to establish the actual number of the dwelling unit you have selected, as it appears on the front door of the unit.

		LAST DIGIT OF SURVEY REFERENCE NUMBER										
		0	1	2	3	4	5	6	7	8	9	
SECOND LAST DIGIT OF SURVEY REFERENCE NUMBER	Please Ring	0	4	3	6	0	7	5	1	1	2	9
	1	8	7	2	3	4	6	9	5	0	6	
	2	1	3	3	9	0	4	2	1	6	2	
	3	5	4	0	1	7	3	5	5	9	6	
	4	3	0	2	8	4	1	9	7	6	3	
	5	7	7	4	5	2	0	3	1	8	9	
	6	2	6	6	1	5	7	8	0	9	4	
	7	9	8	3	2	4	8	6	5	8	1	
	8	7	9	1	0	5	6	7	1	4	4	
	9	6	4	9	2	2	5	3	8	8	5	

5. **If there are 10 or more** dwelling units, you must use the grid in a slightly different way. Choose and circle the next possible **pair** of numbers. If you cannot find a suitable number (i.e. one not greater than the number of dwelling units) on the line you are on, start looking again on the next line down moving from left to right. Similarly, start again at the top left-hand side of the grid if you come to the end of the grid.

Appendix E: Schedule of New Variables

New Variable	Label	Derivation
CA Rural Indicator	Non-rural Rural	Per separate schedule
Sub-Regional Strategic Partnership	Greater Nottingham Partnership Leicestershire Partnership Lincolnshire Enterprise The Alliance SSP Northamptonshire Partnership The Welland Partnership Derby & Derbyshire Economic Partnership	Per separate schedule
Learning & Skills Council	Derbyshire LSC Leicestershire LSC Lincolnshire & Rutland LSC Northamptonshire LSC Nottinghamshire LSC	v9 = 1 v9 = 2 v9 = 3, 6 v9 = 4 v9 = 5
Age Band	16 – 24 years 25 – 34 years 35 – 44 years 45 – 54 years 55 – 59 years 60 – 64 years 65 – 74 years	v14a = 16 – 24 v14a = 25 – 34 v14a = 35 – 44 v14a = 45 – 54 v14a = 55 – 59 v14a = 60 – 64 v14a = 65 – 74
Employment Status	Full-time employed Part-time employed Self-employed Government supported training Unemployed Retired Other inactive	v17 = 1, 6 v17 = 2, 3, 7 v17 = 4 v17 = 5 v17 = 9, 10 v17 = 11 v17 = 8, 12 – 99
Student Status	Student in employment Student not in employment Not student	v17 = 6, 7 v17 = 8 v17 = 1 – 5, 9 – 99
Economic Activity	Active Inactive	v17 = 1 – 7, 9, 10 v17 = 8, 11 – 99
SIC Category	Primary Manufacturing & Construction Services Other Not known	q9coded = 1 – 4, 19 q9coded = 5 – 18, 20 q9coded = 21 – 29 q9coded = 30, 31 q9coded = 32 – 99

New Variable	Label	Derivation
SOC Group	Managerial & administrative Professional Associate professional & technical Clerical & secretarial Craft & related Personal & protective service Sales Plant & machine operatives Other unskilled occupations Not known	q11coded = 1000 - 1999 q11coded = 2000 - 2999 q11coded = 3000 - 3999 q11coded = 4000 - 4999 q11coded = 5000 - 5999 q11coded = 6000 - 6999 q11coded = 7000 - 7999 q11coded = 8000 - 8999 q11coded = 9000 - 9996 q11coded = 9997 - 9999
SOC Level	Higher Order Intermediate Lower Order Not known	q11coded = 1000 - 3999 q11coded = 4000 - 7999 q11coded = 8000 - 9996 q11coded = 9997 - 9999
Organisation Size	1 – 10 employees 11 – 49 employees 50 – 199 employees 200 – 249 employees 250 or more employees Not known	v46 = 1 – 10 v46 = 11 – 49 v46 = 50 – 199 v46 = 200 – 249 v46 = 250 – 9998 v46 = 9999
Investors in People Organisation	Yes No Not known	v127 = 1 v127 = 2 v127 = 3
Time Since Last Trained	Currently training Within last year 1 – 3 years More than 3 years Never since leaving school	v144 = 1 v144 = 2 – 4 v144 = 5 v144 = 6, 7 v144 = 8
Time Spent Training in Last Year	One day or less 2 – 3 days 4 – 7 days 8 – 10 days More than 10 days Not known	v187 = 1 v187 = 2 v187 = 3 v187 = 4 v187 = 5 – 998 v187 = 999
Highest NVQ Equivalence	NVQ Level 5 NVQ Level 4 NVQ Level 3 NVQ Level 2 NVQ Level 1 No level	Derived from Q55 – Q80 per the attached schedule of NVQ Equivalents
Qualified At Least NVQ Level 4	Yes No	NVQ Level 5, 4 NVQ Level 3, 2, 1, No level
Qualified At Least NVQ Level 3	Yes No	NVQ Level 5, 4, 3 NVQ Level 2, 1, No level
Qualified At Least NVQ Level 2	Yes No	NVQ Level 5, 4, 3, 2 NVQ Level 1, No level

New Variable	Label	Derivation
English as First Language	Yes	v332 = 1
	No	v332 = 2
Long-Term Illness or Disability	Yes	v351 = 1
	No	v351 = 2
Ethnic Group	White	v422 = 1 – 3
	Mixed	v422 = 4 – 7
	Asian	v422 = 8 – 11
	Black	v422 = 12 – 14
	Chinese & Other	v422 = 15 – 99
Cigarettes Smoked Per Day	Less than 10 cigarettes	v359 = 1 – 9
	10 – 19 cigarettes	v359 = 10 – 19
	20 or more cigarettes	v359 = 20 – 9998
	Not known	v359 = 9999
Body Mass Index (BMI)	n/a	Derived from Q90 (weight in kilos) and Q91 (height in metres), using the following calculation: weight (kg)/height (m²)
BMI Band	Underweight	BMI = 1 – 20
	Desirable	BMI = 21 – 25
	Overweight	BMI = 26 – 30
	Obese	BMI = more than 30
	Not known	BMI = not known
Travel to Work Time	10 minutes or less	v44 = 1 – 10
	11 – 20 minutes	v44 = 11 – 20
	21 – 30 minutes	v44 = 21 – 30
	31 – 40 minutes	v44 = 31 – 40
	41 – 50 minutes	v44 = 41 – 50
	51 minutes – 1 hour	v44 = 51 – 60
	More than 1 hour	v44 = 61 – 9998
	Not known	v44 = 9999
Time Unemployed	Less than 6 months	Q4 (weeks) = 1 – 25
	6 months – less than 1 year	Q4 (weeks) = 26 – 51
	1 year – less than 5 years	Q4 (weeks) = 52 – 259
	5 years or longer	Q4 (weeks) = 260 – 9999
	Never worked	v21 = 97
Not known	v21 = 98, 99	
State of Health	0 – 10 points	v357 = 0 – 10
	11 – 20 points	v357 = 11 – 20
	21 – 30 points	v357 = 21 – 30
	31 – 40 points	v357 = 31 – 40
	41 – 50 points	v357 = 41 – 50
	51 – 60 points	v357 = 51 – 60
	61 – 70 points	v357 = 61 – 70
	71 – 80 points	v357 = 71 – 80
	81 – 90 points	v357 = 81 – 90
	91 – 100 points	v357 = 91 – 100
	Not known	v357 = 999

Schedule of NVQ Equivalents

Q55 Description		Supplementary Description		NVQ Level
1	Degree level qualification	Q56	Higher degree	Level 5
			First degree	Level 4
			Other degree	Level 4
			Not known	Level 4
2	Diploma in higher education	n/a		Level 4
3	HNC/HND	n/a		Level 4
4	ONC/OND	n/a		Level 3
5	BTEC, BEC or TEC	Q73	Higher level	Level 4
			National certificate/diploma	Level 3
			First or general diploma	Level 2
			First or general certificate	Level 1
			Not known	Level 1
6	SCOTVEC, SCOTEC or SCOTBEC	Q74	Higher level	Level 4
			Full national certificate	Level 3
			First or general diploma	Level 2
			First or general certificate	Level 1
			Modules	No level
			Not known	Level 1
7	Teaching qualification	n/a		Level 4
8	Nursing or other medical qualification	n/a		Level 4
9	Other higher education qualification	n/a		Level 4
10	A level or equivalent	Q63	1 A level or equivalent	Level 2
			1+ A level or equivalent	Level 3
			Not known	Level 2
11	SCE higher	Q64	1 or 2 SCE higher	Level 2
			3+ SCE higher	Level 3
			Not known	Level 2
12	NVQ/SVQ	Q78	Level 1	Level 1
			Level 2	Level 2
			Level 3	Level 3
			Level 4	Level 4
			Level 5	Level 5
			Not known	Level 1
13	GNVQ/GSVQ	Q77	Advanced level	Level 3
			Intermediate level	Level 2
			Foundation level	Level 1
			Not known	Level 1
14	AS level	Q65	1 AS level	Level 1
			2 or 3 AS level	Level 2
			4+ AS level	Level 3
			Not known	Level 1

Schedule of NVQ Equivalents

Q55 Description		Supplementary Description		NVQ Level
15	Certificate of sixth year studies (CSYS) or equivalent		67% at random	Level 3
			33% at random	Level 2
16	O level or equivalent	Q72	Less than 5	Level 1
			5+	Level 2
			Not known	Level 1
17	SCE standard/ordinary	Q72	Less than 5	Level 1
			5+	Level 2
			Not known	Level 1
18	GCSE	Q72	Less than 5	Level 1
			5+	Level 2
			Not known	Level 1
19	CSE	Q72	Less than 5	Level 1
			5+	Level 2
			Not known	Level 1
20	RSA	Q75	Higher diploma	Level 4
			Advanced diploma	Level 3
			Diploma	Level 2
			Other	Level 1
			Not known	Level 1
21	City and Guilds	Q76	Advanced craft	Level 3
			Craft	Level 2
			Foundation	Level 1
			Not known	Level 1
22	YT certificate	n/a		Level 1
23	Other qualifications		10% at random	Level 3
			35% at random	Level 2
			55% at random	Level 1
24	National qualifications (Scotland)	Q66	Access level	No level
			Intermediate level 1	Level 1
			Intermediate level 2	Level 2
			Higher	Level 3
			Advanced higher	Level 4
			Not known	No level
25	Don't know	n/a		No level

Q80 Description	Supplementary Description	NVQ Level
Are you doing, or have you completed, a recognised trade apprenticeship?	Yes – completed (50% at random)	Level 3
	Yes – completed (50% at random)	Level 2
	Yes – still doing	No level
	No	No level